Damages, damages, damages

The damages on the shore were extensive, but the toll from the shocks was greatest on the water. As dawn brought an end to their sleepless night, John Bradbury and his crew looked out on a river covered with foam. Huge trees stood planted in the channel between the island and the shore, flung by the force of the earthquake from the river's bank to lodge in its muddy bottom. Even more ominously, empty boats floated by, with no cargo and no crew.

Collapsing banks were nothing new to boatmen along the Mississippi (River); to them, the mighty river seemed to be continually involved in reshaping itself. But in this first series of shocks, witnesses saw acres of riverbank at a time crash into the channel in huge columns, raising swells seven or eight feet high that rose up like a wall in the middle of the stream, swamping boats and beating furiously against the banks. Because of this fierce wave action, many survivors reported that the Mississippi's current had for a time reversed - in other words, it had actually run backwards.

On land as on the river, the laws of nature and reason alike seemed suspended. As earth waves rippled over the area, the ground resembled the ocean. When the swells burst, they threw up water, sand and charcoal covered with a sulfurous substance. The earth was covered with holes that resembled the craters of volcanoes. Surrounding these sand blows, some of which were up to 30 feet in diameter, were rings of white sand, quite distinct from the mucky black topsoil and more carbonized wood or coal. In the words of a later visitor, James McBride, "All nature appeared in ruins, and seemed to mourn in solitude over her melancholy fate."

In 1811, Missouri was a remote place, and details of the tragedy spread slowly to the rest of the nation. But even before they got the news, almost everyone in the eastern United States knew that something quite spectacular had happened. The tremors rang the bells of St. Philip's Church in Charleston, South Carolina, as well as those in Washington, D.C. The New Madrid Shocks became a national event, with the tremors being felt all the way up to Detroit, New England and parts of Quebec. In all, the quake on December 16 (and the subsequent hard shocks of January 23 and February 7, 1812) was felt over a total of almost one million square miles.

The New Madrid fault is still active, shaking the region periodically with small tremors. Seismologists predict another major quake in the region sometime in the next 50 years.

State Emergency Management Agency
Earthquake Program
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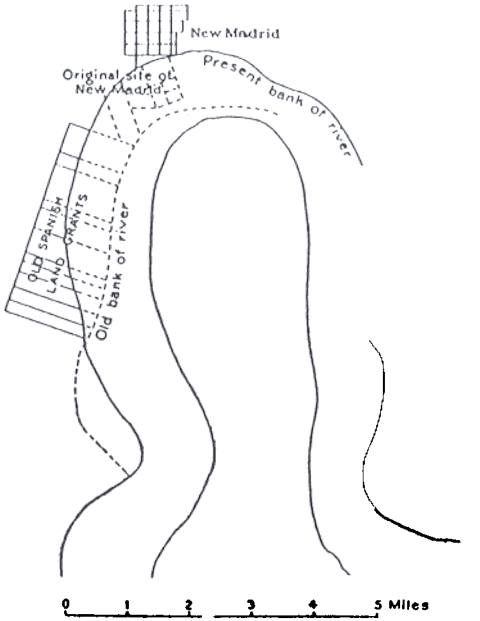


The Day the Mississippi River Ran Backward

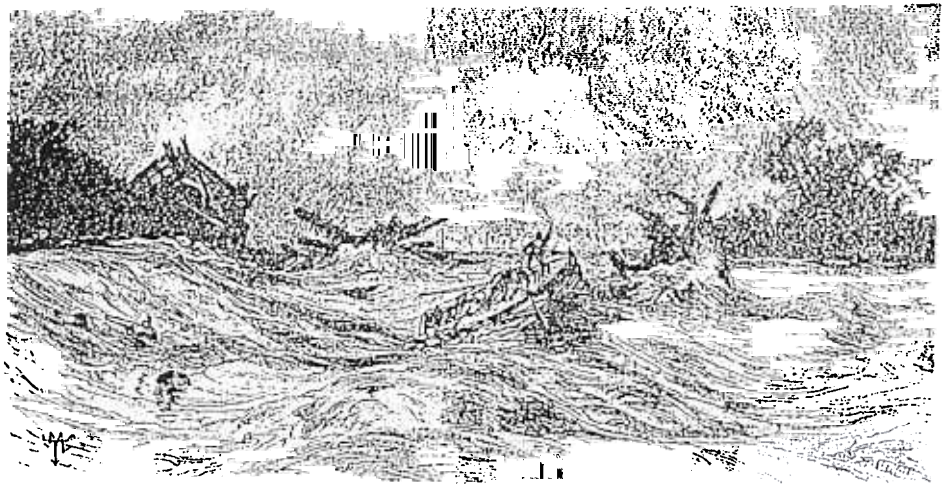
from *Acts of God, The Old Farmer's Almanac, Unpredictable Guide to Weather and Natural Disasters*

Buried deep beneath the bootheel region of southeastern Missouri lies the New Madrid fault, a mighty rift zone 120 miles long. Until it made headlines in 1990, this fault had been largely forgotten. But way back in the winter of 1811-12, the earliest days of western settlement, the worst series of earthquakes in U.S. history brought the name ***New Madrid*** to the lips of every citizen and school child in the nation.

December 16, 1811

In December of 1811, the Scottish naturalist John Bradbury was exploring along the Mississippi River, collecting North American plants for the Botanical Society of Liverpool. He traveled in the manner of the time, on a flatboat ballasted with 30,000 pounds of lead. Even in the daytime, navigation could be tricky on the river, so on the evening of December 15, Bradbury and his French crew decided to moor at a small island for the night.

Around 2 a.m., a cacophony roused the boatmen from their sleep. The air seemed alive with the screaming of birds, the cracking of trees, and the sound of a violent windstorm - though they didn't feel a breath of wind. Then, in the darkness and confusion of the night, there came an even more ominous sound, which Bradbury described as "equal to the loudest thunder, but more hollow and vibrating." New Madrid's long nightmare had begun with a bang.



New Madrid, Missouri, 1811

Nestled in a horseshoe bend of the Mississippi (River), the youthful settlement of New Madrid had been built on a low-terraced ridge of sand and clay, perfectly sited to serve the busy river trade. By 1811, more than 3,000 settlers had come to New Madrid County to begin clearing the forests and draining the rich soil to make way for farms and homesteads. The first hard shock on the morning of December 16 brought an abrupt end to many settler's dreams and ushered in a long winter of severe earthquakes that focused attention more on immediate survival than on any future plans.

Eyewitness Accounts

In a letter first published in the *Lexington (Kentucky) Reporter*, one unnamed resident of New Madrid described in vivid detail the events of the morning of December 16:

... About 2 o'clock this morning, we were awakened by a most tremendous noise, while the house danced about and seemed as if it would fall on our heads. I soon conjectured the cause of our troubles, and cried out it was an Earthquake, and for the family to leave the house; which we found very difficult to do, owing to its rolling and jostling about...

(Shocks continued for the next four and half hours, but) at half past 6 o'clock in the morning..., believing the danger to be over I left home, to see what injury my neighbours had sustained.

A few minutes after my departure there was another shock, extremely violent. I hurried home as fast as I could, but the agitation of the earth was so great that it was with much difficulty I kept my balance - the motion of the earth was about 12 inches to and fro...

The earth seemed convulsed - the houses shook very much - chimnies falling in every direction. The loud, hoarse roaring which attended the earthquake, together with the cries, screams and yells of people, seems still ringing in my ears....